IN THE CLAIMS

The following is a complete listing of the claims, and replaces all earlier listings and all earlier versions.

Claim 1 (currently amended): An image processing apparatus comprising:

a communicator for performing two-way communications, via a communication line, with an image output unit that includes an update unit for updating condition information indicating a condition of the image output unit and a memory for storing the condition information, wherein the condition information is obtained by forming color patches and measuring colors on the color patches;

an input unit for inputting an image output instruction to be communicated to the image output unit via the communication line;

an acquisition unit for acquiring the updated condition information stored in the memory of the image output unit by utilizing said communicator to provide two-way communication, in response to the image output instruction from said input unit; and

an image processor for performing a color conversion process on image data and a calibration ~~processing of~~ process on the converted image data ~~comprising pixels~~, [[each]] having a bit length, in accordance with the condition information acquired by said acquisition unit,

wherein said image processor decreases [[a]] the bit length ~~for each pixel~~ of the calibrated image data processed by said image processor in accordance with the condition information and then outputs the bit-length-decreased image data to the image output unit via [[a]] the communication line.

Claim 2 (previously presented): The apparatus according to claim 1, wherein the image output unit further includes:

an engine unit; and

a condition acquisition unit for automatically acquiring the condition information in accordance with a change in status of the engine unit, wherein the acquired condition information is stored in the memory of the image output unit.

Claim 3 (previously presented): The apparatus according to claim 1, wherein the condition information is a measurement result of a plurality of patches outputted by the image output unit.

Claim 4 (previously presented): The apparatus according to claim 1, wherein said image processor converts image data into multi-valued data corresponding to a type of a recording medium used in the image output unit, and performs calibration processing in accordance with the condition information.

Claim 5 (canceled)

Claim 6 (previously presented): The apparatus according to claim 1, further comprising:

a user interface for setting whether or not the image processing is to be done in accordance with the condition information.

Claim 7 (~~withdrawn~~ previously presented): An image processing apparatus connected, via a communication network, with a host computer and a plurality of image output units, each image output unit adapted to perform a function of updating condition information of the image output unit, the condition information being obtained by forming color patches and measuring colors on the color patches, said apparatus comprising:

an input unit for inputting the condition information updated by the plurality of image output units;

a memory for storing the inputted condition information in association with each of the plurality of image output units;

a transmitter for transmitting the stored updated condition information to the host computer in accordance with a request for acquiring the condition information issued by the host computer; and

a management unit for managing an image output job of the host computer,

wherein the condition information is obtained by forming color patches and measuring colors on the color patches,

~~wherein the host computer performs calibration processing of image data comprising pixels, each having a bit length,~~ in accordance with the condition information transmitted by said transmitter,

wherein the ~~host computer decreases a bit length for each pixel of calibrated image data~~ processed in accordance with the condition information and then outputs the bit-length-decreased image data to the image output unit via a communication line, and

wherein each of the plurality of image output units outputs an image based on the image data processed by the host computer.

Claim 8 (~~withdrawn~~): The apparatus according to claim 7, further comprising a second management unit for managing an image output job for an image output unit.

Claim 9 (~~withdrawn~~): The apparatus according to claim 7, wherein each of the plurality of image output units comprises:

an engine unit;

a condition acquisition unit for automatically acquiring the condition information in accordance with a change in status of the engine unit; and

a memory for storing the acquired condition information.

Claim 10 (~~withdrawn~~): The apparatus according to claim 7, further comprising:

a user interface for setting whether or not image processing is to be done in accordance with the condition information.

Claim 11 (~~withdrawn~~): An image processing method for performing image processing in a network system to which an image output apparatus, a server, and a network terminal are connected, said method comprising:

in the image output apparatus:

a condition measurement step, of updating condition information by forming color patches and measuring colors on the color patches; and

a notification step, of notifying the server of the updated condition information,

in the server:

a storage step, of storing the ~~updated condition information~~ in accordance with notification from the image output apparatus in correspondence with a type of the image output apparatus; and

a management step, of managing an image output job, and

in the network terminal:

an input step, of inputting an image output instruction of a user;

an acquisition step, of acquiring the updated condition information stored in the server in response to the image output instruction; and

~~an calibration processing step, of performing calibration processing of image data comprising pixels, each having a bit length~~, using an calibration processing condition in accordance with the updated condition information, ~~wherein said calibration processing step decreases a bit length for each pixel of calibrated image data processed in~~ accordance with the condition information and then outputs the bit-length-decreased image ~~data to the~~ image output unit via a ~~communication line.~~

Claim 12 (~~withdrawn~~): An image processing method performed in a server connected, via a communication network, with a host computer and a plurality of image output units, each image output unit adapted to perform a function of updating condition information indicating a condition of the image output unit, said method comprising:

an input step, of inputting an image output instruction;

an acquisition step, of acquiring the condition information stored in the image output unit by utilizing two-way communications, in response to the image output instruction; and

~~an calibration processing step, of performing calibration processing of image data comprising pixels, each having a bit length,~~ in accordance with the condition information acquired in said acquisition step, ~~wherein said calibration processing step~~ decreases a bit length for ~~each~~ pixel of calibrated image data processed in accordance with the condition information and then outputs the bit-length-decreased image data to the ~~image~~ output unit via a ~~communication~~ line.

Claim 12 (~~withdrawn~~): An image processing method performed in a server connected, via a communication network, with a host computer and a plurality of image output units, each image output unit adapted to perform a function of updating condition information of the image output unit, said method comprising:

an input step, of inputting the condition information updated by the plurality of image output units;

a storage step, of storing the inputted condition information in association with each of the plurality of image output units;

a transmission step, of transmitting the stored condition information to the host computer in accordance with a request for acquiring the condition information issued by the host computer; and

a management step, of managing an image output job of the host computer,

wherein the condition information is obtained by forming color patches and measuring colors on the color patches,

~~wherein the host computer performs calibration processing of image data comprising pixels, each having a bit length,~~ in accordance with the condition information transmitted in said transmission step,

~~wherein the host computer decreases a bit length for each pixel of calibrated image data~~ processed in accordance with the condition information and then outputs the bit-length-decreased image data to the image output unit via a communication line, and

wherein each of the plurality of image output units outputs an image based on the image data processed by the host computer.

Claim 14 (currently amended): A computer-readable storage medium that stores a program for implementing, by a computer, an image processing method, the program comprising:

code for a communication step, of performing two-way communications, via a communication line, with an image output unit that includes an update unit for updating condition information indicating a condition of the image output unit and a memory for storing the condition information, wherein the condition information is obtained by forming color patches and measuring colors on the color patches;

code for an input step, of inputting an image output instruction;

code for an acquisition step, of acquiring the updated condition information stored in the image output unit by utilizing the two-way communications, in response to the image output instruction; and

code for [[an]] a conversion and calibration processing step, of performing color conversion on image data and calibrating the converted ~~calibration~~

~~processing of~~ image data ~~comprising pixels~~, [[each]] having a bit length, in accordance with the condition information acquired by the acquisition step,

wherein ~~said calibration processing step decreases a~~ the bit length ~~for each pixel~~ of the calibrated image data, processed in accordance with the condition information, is decreased and then [[outputs]] the bit-length-decreased image data is outputted to the image output unit via [[a]] the communication line.

Claim 16 (~~withdrawn~~): A computer-readable storage medium that stores a program for an image processing method performed by a server connected, via a communication network, with a host computer and a plurality of image output units, each image output unit adapted to perform a function of updating condition information of the image output unit, the program comprising:

code for an input step, of inputting the condition information updated by the plurality of image output units;

code for a storage step, of storing the inputted condition information in association with each of the plurality of image output units;

code for a transmission step, of transmitting ~~the stored condition~~ information to the host computer in accordance with a request for acquiring the condition information issued by the host computer; and

code for a management step, of managing an image output job of the host computer,

wherein the condition information is obtained by forming color patches and measuring colors on the color patches,

wherein the host computer performs calibration processing of image data comprising pixels, each having a bit length, in accordance with the condition information transmitted by the transmission step,

wherein the host computer decreases a bit length for each pixel of calibrated image data processed in accordance with the condition information and then outputs the bit-length-decreased image data to the image output unit via a communication line, and

wherein each of the plurality of image output units outputs an image based on the image data processed by the host computer.

Claim 16 (new): An image processing system for performing image processing comprising:

means for managing an image output job;

means for communicating with an image output unit;

means for updating condition information indicating a condition of the image output unit by forming color patches and measuring colors on the color patches, wherein the image output unit transmits a notification that the condition information has been updated,

means for storing the updated condition information in accordance with the notification;

means for inputting an image output instruction from a user; and

means for performing a color conversion on image data and calibrating the converted image data, having a bit length, using a calibration processing condition in accordance with the updated condition information in response to the image

output instruction from the user, wherein the bit length of the calibrated image data, processed in accordance with the condition information, is decreased and then the bit-length-decreased image data is outputted to the image output unit.

Claim 16 (new): An image processing method comprising:

a communication step, of performing two-way communications, via a communication line, with an image output unit, the image output unit includes an update unit for updating condition information indicating a condition of the image output unit and a memory for storing the condition information, wherein the condition information is obtained by forming color patches and measuring colors on the color patches;

an input step, of inputting an image output instruction to be communicated to the image output unit via the communication line;

an acquisition step, of acquiring the updated condition information stored in the memory of the image output unit by utilizing the two-way communications, in response to the image output instruction inputted in said input step; and

a conversion and calibration process step, of performing a color conversion process on image data and calibrating the converted image data, having a bit length, in accordance with the condition information acquired in said acquisition step,

wherein the bit length of the calibrated image data, processed in accordance with the condition information, is decreased and then the bit-length-decreased image data is outputted to the image output unit via the communication line.

Claim 18 (new): The method according to claim 17, wherein the image output unit further includes:

an engine unit, and

the method further includes a condition acquisition step, of automatically acquiring the condition information in accordance with a change in status of the engine unit, wherein the acquired condition information is stored in the memory of the image output unit.

Claim 19 (new): The method according to claim 16, wherein the condition information is a measurement result of a plurality of patches outputted by the image output unit.

Claim 20 (new): The method according to claim 16, wherein said conversion and calibration process step includes converting image data into multi-valued data corresponding to a type of a recording medium used in the image output unit, and performing calibration processing in accordance with the condition information.

Claim 21 (new): The method according to claim 16, further comprising:

a set step, of setting whether or not the image processing is to be done in accordance with the condition information.